

5121

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Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
....., Director	
<div></div>	
State: <u>Georgia</u>	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 5121
LOCALITY	
Vicinity of Sapelo Sound	
Georgia East Coast	
Upper Sapelo River, Near Townsend	
1935	
CHIEF OF PARTY	
S. B. Grenell	

U. S. GOVERNMENT PRINTING OFFICE: 1921

5121

applied to new compilation drawing of Chart 574 - Oct. 13, 1936 - J.F.W.

~~applied to Chart 1242~~

~~Mar. 14, 1937 J.H.S.~~

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No.

REGISTER NO. 5121

State Georgia

General locality Georgia East Coast Vicinity of Sapelo Sound

Locality Upper Sapelo River Near Townsend
photographs

Scale 1:20,000 Date of ~~Survey~~ 9-20-33 9-22-33

Vessel Aerial photo Compilation Party #18

Reviewed and recommended for approval:

Chief of party Lieut. (j.g.) S. B. Grenell

Photographs plotted by:

~~Surveyed by~~ F. B. Hickman

Inked by J. W. Osteen, Jr.

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 10, 1933, 19

Remarks: Compilation of aerial photos Nos. (M-67) 144 to 155,

67-48 to 67 61; 66-68 to 66-78

--NOTES OF COMPILATION--

One copy of this form must accompany each chart from beginning to completion. The last draftsman, whose name appears on this form, is responsible for it and all personnell will endeavor to keep these forms up to date and correctly posted. This form is very important inasmuch as the final Descriptive Report of the chart compiled is based upon the information contained herein.

SHEET No. 5121

M-66 67 80 (Sept. 20, 1933)
 PHOTO NO. M-67 44 to PHOTO NO. 62 (Sept. 22, 1933)
 M-67 43 158

BY	START	FINISH
ROUGH RADIAL PLOT <u>B. B. Lewis</u>	<u>7-10-34</u>	<u>7-15-34</u>
SCALE FACTOR (.915) <u>B. B. Lewis</u>	<u>7-16-34</u>	<u>7-16-34</u>
SCALE FACTOR CHECKED <u>S. B. Grenell</u>	<u>7-16-34</u>	<u>7-16-34</u>
PROJECTION <u>A. M. Gruber</u>	<u>7-18-34</u>	<u>7-19-34</u>
PROJECTION CHECKED <u>C. E. Helfrich</u>	<u>7-20-34</u>	<u>7-20-34</u>
CONTROL PLOTTED <u>A. M. Gruber</u>	<u>7-20-34</u>	<u>7-20-34</u>
CONTROL CHECKED <u>W. C. Oliver</u>	<u>7-21-34</u>	<u>7-21-34</u>
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT <u>F. B. Hickman</u>	<u>8-2-34</u>	<u>9-5-34</u>
RADIAL LINE PLOT CHECKED <u>S. B. Grenell</u>	<u>8-3-34</u>	<u>9-6-34</u>
DETAIL INKED <u>U. W. Ostee, Jr.</u>	<u>8-10-34</u>	<u>10-25-34</u> <u>12-7-34</u>
AREA DETAIL INKED <u>111.0</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. <u>7.2</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m. <u>12.0</u>	Statute Miles	
GENERAL LOCATION <u>Georgia East Coast</u>		
LOCATION <u>Sapelo River, Near Townsend</u>		
DATUM STATION <u>Crescent 1932</u>	LATITUDE <u>31°-30' - 32.552 (1002</u>	
DATUM <u>N. A. 1927</u>	LONGITUDE <u>81°-22' - 13".977 (36</u>	

Adjusted

INSPECTION REPORT

COMPILATION 5121

Scale 1:20,000

REFERENCE:-

In reviewing this sheet in the Washington office reference should be made to the General Report for 5-lens Sheets forwarded with compilation No. 5114.

GENERAL INFORMATION:-

This compilation covers the general area for the Sapelo River southward for approximately eight miles and from a junction with coastal compilation No. 5120 inland to a line parallel with and approximately three miles west of the S. A. L. R.R.

The Sapelo River constitutes the only important water area on the compilation. The balance of the area consists of the wooded coastal mainland.

TOPOGRAPHIC DETAIL:*

The main coastal highway, Route #17, passes across the central part of the compilation. Parallelling this highway and a few miles inland is the single track main line of the Seaboard Air line R.R.. This railroad passes through the village of Townsend where a large lumber mill is located. The workmen's houses, the mill and part of the logging tram road are shown. Most of this section has been logged off as indicated by the scattering tree symbols. The heavy growth in the swampy sections still stands and as indicated by symbol gives a good idea of the main drainage system of the area. The larger areas of heavy timber are left blank in the center and marked "Heavily Wooded".

The areas logged off support a growth consisting mainly of seedling pine and brush. The Heavily wooded sections are mostly gum with other mixed deciduous growth.

CONTROL:-

The radial plot was controlled entirely from the following triangulation and traverse schemes: - First order arc by C. D. Meaney, 1932; coordinating scheme of C. M. Durgin, 1933-33; third order control by C. A. Egner, 1934 and traverse along the S.A.L.R.R. by Melvin E. Lutz, 1918. It was necessary for the compilation party to run an additional traverse along route #17 and connecting highways from first order station RICE to station CRESCENT. Part of this traverse falls on the compilation. *The total traverse length was 16 miles; the closure 2.3 meters.

COMPARISON WITH CONTEMPORARY SURVEYS:-

Satisfactory junctions have been made and checked with all adjoining compilations. *See Review*

There were several short sections of shoreline from the field control sheets of C. A. Egner along the Sapelo River. These checked perfectly as well as shoreline agreement with the fixed control hydrography. *See Review*

office. They are not shown on the compilation. Some of the stations were plotted on the compilation in the field and can be located on the sheet from the quick points. They are not marked.

** The stations on this traverse were not marked and no records sent to the Washington office.*


LANDMARKS FOR CHARTS:-

Form 567 for the Sapelo River has been submitted by
C. A. Egner, 1934

NAMES ON OVERLAY SHEET:-

All names appearing on the overlay sheet were taken
from current issues of charts and Geological Survey maps.

Respectfully submitted,


S. B. Grenell,
Chief of Party #18

REPORT OF COMPILATION:

COMPILATION METHOD:

This sheet was compiled by the standard radial line plot method. No difficulty was experienced in the adjustment of plot with the control available.

ADJUSTMENT OF PHOTOGRAPHS:

Several photographs in the M-66 flight were badly tilted but with the exception of these, the photographs were shifted to fit the detail with very little difficulty.

INTERPRETATION:

The photographs of the M-66 flight were not very clear or sharp as to detail; therefore, a little trouble was encountered in finding the high water line. When matched to this shoreline the hydrography matched perfectly.

Only standard topographical symbols were used.

INFORMATION FROM OTHER SOURCES:

Photographs were the only source of information used on this sheet.

COMPARISON WITH OTHER SURVEYS:

Junctions with adjoining 1:20,000 sheets, 5 lens, are complete and satisfactory.

ACCURACY AND COMPLETENESS:

The area covered in this sheet is complete in every detail as nearly as can be determined by the photographs; all well defined detail is located with a possible error of not more than 4 meters; less well defined detail with an error of not more than 10 meters.

PHOTOGRAPHS:

No.	to.	No.	Date	Time	Stage of Tide
M-67-144		M-67-155	9-22-33	10:20AM	No water line from this flight
M-67-148		M-67-61	9-22-33	10:20AM	7/8
M-66-68		M-66-78	9-20-33	10:30AM	5/8

J. W. Osteen Jr.
J. W. Osteen,
Draftsman

Approved: *S. B. Grenell*

S. B. Grenell,
Chief of Party

** A better value for possible error for a compilation on this scale is 4 to 8 meters for all well defined detail and 10 to 15 meters for less well defined detail.*

REVIEW OF AIR PHOTO COMPILATION T-5121

1. Comparison with Graphic Control Surveys.

a. T-6160b (1934) 1:10,000 covers the upper reaches of Sapelo River east from the Highway bridge at lat. $31^{\circ} 32.3'$, long. $81^{\circ} 25.5'$ to long. $81^{\circ} 22'$.

Comparison of high water lines showed a number of differences varying from $1/10$ mm. to $1\frac{1}{2}$ mm. Many additional radial points were carefully added to the plot and the H. W. L. carefully checked. In all places where differences were found these were partly due to erosion. The compilation has been corrected in this office. The remaining differences of from $1/10$ to $4/10$ mm. are at lat. $31^{\circ} 32.1'$, long. $81^{\circ} 24.9'$, lat. $31^{\circ} 31.2'$, long. $81^{\circ} 23.5'$, and lat. $31^{\circ} 33'$, long. $81^{\circ} 22'$, and are due to different interpretation of the H. W. L.

At lat. $31^{\circ} 31.95'$, long. $81^{\circ} 22.2'$ undescribed station Rock falls approximately $4/10$ mm., from H. W. L., out in Sapelo River. It is not mentioned in the Descriptive Report for H-5580 or T-6160b. Nothing can be seen on the photos and the station has not been shown on the compilation.

A dock at lat. $31^{\circ} 32.6'$, long. $81^{\circ} 22.5'$ has been cut in by radials and added to the compilation in this office. T-6160b shows an undescribed station at this point on the inshore end of the dock rather than on the outer end as is usual. It is not known whether this station is in error on T-6160b as it is not recoverable on the photographs.

All detail on the graphic control survey is shown on the compilation except temporary graphic control stations and the magnetic declination.

b. T-6160a (1934) 1:10,000 covers the northeast corner of this compilation, north of lat. $31^{\circ} 30'$ and east of long. $81^{\circ} 22'$.

Comparison of short stretches of high water line showed a number of differences $1/10$ to $5/10$ mm. The south H. W. L. of Sapelo and Back River at lat. $31^{\circ} 32.4'$, long. $81^{\circ} 19.3'$ differed by $1/10$ to 2 mm., but no error was found in the compilation at this point. The rodged H. W. L. shown on T-6160a is evidently incorrect as it does not even resemble the H. W. L. on photos.

At lat. $31^{\circ} 30.2'$, long. $81^{\circ} 20.2'$, lat. $31^{\circ} 32.2'$, long. $81^{\circ} 20.8'$, lat. $31^{\circ} 32.3'$, long. $81^{\circ} 21.8'$ errors were found in the compilation and corrections of $1/10$ to $5/10$ mm. made. At other places where H. W. L. differed by $1/10$ to $5/10$ mm. no errors were found in the compilation and the differences are due to interpretation. These differences were at lat. $31^{\circ} 30.4'$, long. $81^{\circ} 21.2'$, lat. $31^{\circ} 30.8'$, long. $81^{\circ} 21.1'$, $31^{\circ} 31.4'$, long. $81^{\circ} 21.05'$, lat. $31^{\circ} 32.2'$, long. $81^{\circ} 20.9'$, and lat. $31^{\circ} 32.3'$, long. $81^{\circ} 21.7'$.

All detail on the graphic control survey covered by this compilation is shown on the compilation except temporary graphic control stations and the magnetic declination.

c. T-6195a (1934) 1:10,000 covers a very small portion of Hudson River and Atwood Creek along the eastern edge of the compilation.

No described stations were in this area and only two short sections of H. W. L. could be compared. They checked within 2/10 mm.

All detail on the graphic control survey covered by this compilation is shown on the compilation except temporary graphic control stations and the magnetic declination.

2. Comparison with Contemporary Hydrographic Surveys.

a. H-5634 (1934) 1:10,000 covers that part of Connegon River and North River shown on this compilation west of longitude 81° 22'.

No discrepancies noted.

b. H-5632 (1934) 1:10,000 covers a short section of Hudson River and Atwood Creek along the eastern edge of the compilation.

The H. W. L. at no place interfered with the hydrography. In some places temporary topographic stations plotted out in the stream instead of on land. At such stations the compilation H. W. L. was carefully checked but no error found.

c. H-5633 (1934) 1:10,000 covers a narrow strip along the eastern edge of this compilation including Cedar Creek, and parts of Shellbluff Creek and South Sapelo River. No discrepancies ^{with} in the soundings.

d. H-5580 (1934) 1:10,000 covers all of Sapelo River shown on this compilation, Back River and the upper reaches of South Sapelo River.

The island on H-5580 in Back River at lat. 31° 31.8', long. 81° 20.1' is visible on photos but is evidently a low water island. It has been shown on the compilation with marsh symbols.

The low water area on H-5580 opposite island in Back River at lat. 31° 31.6' long. 81° 20.3' is not visible on photos and is not shown on the compilation.

H. W. L. and docks in the vicinity of lat. 31° 31.5', long. 81° 21.5' have been added to the compilation from the photos in this office.

The H. W. L. of Marsh island in the upper reaches of South Sapelo River (lat. 31° 30.7', long. 81° 21.5') has been removed and the island shown simply by marsh symbols. The island is evidently covered at high water as soundings were taken across the middle. The H. W. L. is now shown where the high ground begins near the woods.

West of long. $81^{\circ} 21'$ the H.W. L. of Sapelo River has been corrected in a number of places. In no places do the corrections disagree with the hydrography.

3. Comparison with Previous Topographic Surveys.

a. T-721 (1857-8) 1:20,000 covers Back River and a short section of Sapelo River in the northeast corner of this compilation.

Back River has broken through a narrow marsh strip at lat. $31^{\circ} 31.7'$ long. $81^{\circ} 20.1'$ forming a large island at this point.

The small island near the west shore of Back River at lat. $31^{\circ} 31.7'$ long. $81^{\circ} 20.15'$ is no longer there but there is a small island about 200 meters northeast of this point which does not show on T-721.

The high ground and marsh land has changed little.

The compilation is complete and adequate to supersede T-721 for the part it covers.

b. T-1080 (1868) 1:20,000 covers a narrow strip down the eastern edge of this compilation.

A small island in Cedar Creek at lat. $31^{\circ} 29.5'$, long. $81^{\circ} 21.5'$ on T-1080 does not show on photos and is not shown on compilation. However, the photos show an island about 300 meters farther east, near the mouth of Creek, which is not shown on T-1080 but has been shown on the compilation.

Shellbluff Creek is practically the same. A small island on T-1080 at lat. $31^{\circ} 28.8'$, long. $81^{\circ} 20.4'$ does not show on the photos and is not shown on the compilation.

At lat. $31^{\circ} 28.2'$, long. $81^{\circ} 20.6'$ Atwood Creek has cut through the marsh forming an island that does not show on T-1080. Another small island is seen on photos just south of this larger island and both have been shown on the compilation.

That part of Hudson River shown on this compilation has changed considerably. A large island on T-1080 at lat. $31^{\circ} 27.3'$, long. $81^{\circ} 21.6'$ does not show on photos and is not shown on compilation.

Three islands at lat. $31^{\circ} 27'$, long. $81^{\circ} 21.9'$ on T-1080 are shown as two islands on the compilation.

Islands at lat. $31^{\circ} 26.9'$, long. $81^{\circ} 22'$; lat. $31^{\circ} 26.6'$, long. $81^{\circ} 22.2'$; lat. $31^{\circ} 26.7'$, long. $81^{\circ} 22.3'$ and lat. $31^{\circ} 26.5'$, long. $81^{\circ} 22.5'$ on T-1080 cannot be seen on photos and are not on the compilation.

Around all high ground on T-1080 a bluff symbol has been shown which has not been put on the compilation.

The compilation is complete and adequate to supersede T-1080 for the part it covers.

4. Comparison with Charts 1241 and 574.

Only a narrow strip along the eastern edge of the compilation is covered by charts of this Bureau.

Old landmarks on present charts within the area of this compilation have ^{been} shown on the compilation. No new landmarks have been submitted with the graphic control surveys on this compilation for this area.

Remarks.

The compilation projection has been checked in this office and diagonals over 6 and 8 minute blocks fail to check by 3/10 and 4/10 millimeters. This is due to a slight error in the spacing of longitude lines east of 81° 27'. The longitude lines east of 81° 27' are incorrectly spaced 1/10 to 3/10 millimeters. Diagonals check using the correct spacing for these lines. No change has been made in the projection in this office.

Additional unimproved roads, grass symbols and trees have been added to the compilation in this office.

The highway joining crescent with the U. S. Highway #17 was corrected as much as 2 mm. in some places.

Recoverable \odot stations were transferred from T-6160a to the compilation in this office by *m. Crook* and checked by *R. C. Hande*. Eleven Δ stations were added to the compilation in this office by *m. Crook* and checked by *R. C. Hande*.

m. Crook
Aug. 19, 1935
V. B. Jones

GEOGRAPHIC NAMES

Date. March 22, 1935.

Survey No. T-5121

Chart No. 1241

Diagram No. 1241

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
✓	<u>Creighton I.</u>	Ch 574			
✓	<u>Back River</u>	Ch 574			
✓	<u>Sapello</u>				
✓	<u>Sapello River</u>	do. 1241			
✓	<u>Eulonia Station</u>	none	Sapello River Quad USE.		
✓	<u>Fairhope</u> delete	none	This is Pine Harbor on Soil Map. do.		
✓	<u>Townsend.</u>	none	Ludowici Quad USE.		
✓	<u>Warsaw.</u> (old name J.)	none.	Sapello River Quad USE.		
✓	<u>Briardam Road</u>	"	Darien Quad USE		
✓	<u>King Road</u>	"	do		
✓	South Sapello River	do 574 delete	do		
?	<u>Cedar Creek</u>	none	Sapello R. Quad		
✓	<u>Seaboard Airline</u>	"	do		
?	<u>Forest</u> St.	" Crescent-jm	do		
✓	<u>North River</u>	574			
✓	<u>Buzzard Roost Cr.</u>	574			
✓	<u>Connegon River</u>	1241, 574			
✓	<u>Hudson</u> Creek	1241 574	Hudson Creek Darien R.	U.S. E.	
✓	<u>Atwood creek</u>	1241, 574			
✓	<u>Shell/bluff creek</u>	1241, 574			
✓	<u>Valona</u>	none	Darien Quad USE		
✓	<u>Meridian</u>	"	"	"	"
	<u>Smith Road</u>	"	"	"	"
✓	<u>Crescent</u> St. St.		Sapello River "	"	
✓	<u>Patterson I</u>	(Not on this comp) (see T5220)	Darien Quad		
✓	<u>Connegon</u>		Soil Map		

Names underlined in red approved
by KTA on 1/5/36

REVIEW OF AIR PHOTO COMPILATION NO. 5121

Chief of Party: S.B. GREENELL

Compiled by: J.W. Osteen, Jr.

Project: F.P.H. Ga. Party #18

Instructions dated: Nov 10, 1933.

1. ✓ The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)
2. ✓ Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)
3. ✓ Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)
Traverse from Rice to Crescent - 16 miles; closure 2.3 meters.
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28) *None used.*
5. ✓ Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.
6. ✓ The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i).
7. ✓ High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

8. ✓ The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)
9. ✓ Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)
Form 524 by C.A. Egner, 1934
10. ✓ A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)
Form 567, C.A. Egner, 1934.
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)
No bridges over navigable streams.
12. ✓ Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)
13. The geographic datum of the compilation is *N.A. 1927* and the reference station is correctly noted. *(Adjusted)*
14. ✓ Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)
15. ✓ The drafting is satisfactory and particular attention has been given the following:
 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report. ✓
 2. The degrees and minutes of Latitude and Longitude are correctly marked. ✓

3. All station points are exactly marked by fine ✓
black dots.
4. Closely spaced lines are drawn sharp and clear ✓
for printing.
5. Topographic symbols for similar features are of ✓
uniform weight.
6. All drawing has been retouched where partially ✓
rubbed off.
7. Buildings are drawn with clear straight lines ✓
and square corners where such is the case on
the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time. ✓

17. Remarks:

18. Examined and approved;

Jan. 24, 1935

J.B. Linnell
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

McCrook, Aug. 16, 1935
B.G. Jones

Examined and approved:

E. K. Green
Chief, Section of Field Records

L.O. Lobat
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

Wude
Chief, Division of Hydrography
and Topography.